PATENT APPLICATION

RESPONSE UNDER 37 CFR §1.116
EXPEDITED PROCEDURE
TECHNOLOGY CENTER ART UNIT 2173

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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B. Hilliard

In re the Application of

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Gene M. NITSCHKE

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Group Art Unit: 2173

Application No.: 09/411,642   **Technology Center 2100**

Examiner: C. Thai

Filed: October 4, 1999

Docket No.:   103045

For: METHOD AND SYSTEM TO ESTABLISH DEDICATED INTERFACES FOR THE MANIPULATION OF SEGMENTED IMAGES

REQUEST FOR RECONSIDERATION AFTER FINAL REJECTION

Director of the U.S. Patent and Trademark Office
Washington, D.C. 20231

Sir:

In reply to the Office Action mailed June 3, 2002, reconsideration of the rejection is respectfully requested in light of the following remarks.

Claims 1-21 are pending.

Applicant acknowledges with appreciation the courtesies extended to Mr. Robert Webster by Examiners Ba and Thai during the personal interview held on August 26, 2002.

Applicant especially thanks Examiner Ba, who had to substitute at the last minute for the Primary Examiner originally scheduled to be present at the interview, but who was unavailable to attend the interview.

In this regard, Applicant respectfully requests that the Primary Examiner who reviews this Request for reconsideration After Final Rejection on its merits consult with Examiner Ba and obtain input from Examiner Ba concerning the arguments presented at the interview.

Applicant also thanks Examiner Thai for considering all but one of the fourteen (14) references filed with the two PTO-1449 with the Information Disclosure Statement on October 4, 1999, by listing them on a PTO-892. Applicant can find no indication that the examiner has considered U.S. Patent 5,802,203, which was listed on the PTO-1449 filed on October 9, 1000. Applicant respectfully requests that the Examiner consider U.S. Patent 5, 802,203 and indicate in the next Office Action that the reference has been considered.

The Office Action rejects claims 1-3, 6, 9-14, 16 and 21 under 35 USC §103(a) as unpatentable over U.S. Patent 5,787,194 to Yair in view of U.S. Patent 6,341,183 to Goldberg. This rejection is respectfully traversed.

Claim 1 recites (1) a system that assembles a dedicated user interface that allows an input segmented image to be manipulated comprising (a) a segmentation classification association circuit that associates a segmentation classifier and at least one segment of the input segmented image, and (b) an image processing tool association circuit that determines at least one image processing tool corresponding to the segmentation classifier.

Claim 2 recites, in addition to the features recited in claim 1, a user interface assembly circuit that assembles at least one selectable interface widget into at least one user interface based on the at least one image processing tool corresponding to the segmentation classifier.

Claim 3 recites, in addition to the features recited in claim 2, that the system modifies the at least one segment based on a selection of the at least one image processing tool associated with the at least one user interface.

Claim 6 recites, in addition to the features of claim 1, a segmentation selection circuit that selects the at least one segment.

Claim 9 recites, in addition to the features of claim 1, that the dedicated user interface is a graphical user interface comprising at least one of a drop-down menu, a pull-down menu, a radio button, a tab button, a segment display area or a slide bar.

-2-

Claim 10 recites (1) a storage medium that stores information, the information controlling assembly of a dedicated user interface that allows manipulation of an input segmented image and comprising (a) information that associates a segmentation classifier and at least one segment of the input segmented image, and (b) information that determines at least one image processing tool corresponding to the segmentation classifier.

Claim 11 recites the features of claim 10 and information that assembles at least one user interface based on the at least one image processing tool corresponding to the segmentation classifier.

Claim 12 recites (1) a method of assembling a dedicated user interface for manipulation of an input segmented image comprising (a)   determining a segmentation classifier associated with at least one segment of the input segmented image, and (b) associating at least one image processing tool with the at least one segment of the input segmented image.

Claim 13 recites the features of claim 12, and assembling at least one selectable interface widget into at least one user interface based on the at least one image processing tool associated with the segmentation classifier.

Claim 14 recites the features of claim 13, and modifying the at least one segment based on a selected image processing tool.

Claim 16 recites the features of claim 12, and selecting at least one segment.

Claim 21 recites the features of claim 12 and that the dedicated user interface is a graphical user interface comprising at least one of a drop-down menu, a pull-down menu, a radio button, a tab button, a segment display area or a slide bar.

Yair is directed to an image processing apparatus for segmenting an image into image portions containing single characters for subsequent storage and processing by an OCR apparatus. See col. 1, lines 8-14 of Yair. Yair discloses that an OCR input image may

contain an arbitrary number of connected components, where each component could represent several characters joined together, a single character, a part of a character, noise, or any other piece of image. See col. 2, lines 24-28 of Yair. Yair also discloses that it is essential for any OCR application to handwritten data to be able to handle both connected and broken characters in the same field of data. See col. 1, lines 36-39 of Yair. Yair is directed to solving the problem of segmentation of a field into its individual characters, such as found in tax forms, zip codes, census forms and credit card slips. See col. 2, lines 1-7 of Yair. Examples of handwritten individual characters are shown in Figs. 6 and 7 of Yair.

Yair does not disclose what is recited in claim 1. Claim 1 recites "a system that assembles a dedicated user interface that allows an input segmented image to be manipulated." In the first place, Yair does not disclose or suggest "a dedicated user interface."

In the second place, Yair does not disclose "a dedicated user input that allows an input segmented image to be manipulated." Yair starts with an image capture device 100, and then uses a segmentation module 140, shown in general terms in Fig. 1 and in detail in Fig. 2. Yair is directed to segmenting an "OCR input image" - see col. 2, line 24. The OCR input image is inputted via an "image capture device 100 of any suitable type, e.g., an optical camera or scanner" - see the sentence bridging columns 3 and 4 of Yair. In col. 4, lines 1-10, Yair discloses that the input image is digitized and stored in the form of a bi-level image comprising rows and columns of binary pixels in a suitable format in a data storage device 110. The signal from input device 100 is passed to a data processing system 120, which includes the data storage device 110, OCR module 130 and segmentation module 140.

It is clear from this reading of Yair, that what is input to Yair is not a segmented image. Rather, what is input is an unsegmented image that is sent to segmentation module 140. In applicant's claimed invention, the system assembles a dedicated user interface that

allows an input segmented image to be manipulated, whereas Yair does not have (1) a dedicated user interface, or (2) a input in the form of a segmented image which a dedicated user interface can manipulate. Thus, Yair fails to anticipate these features of claim 1.

The allegation that the recited "segmentation classification association circuit" is found in Yair is nor persuasive and overlooks the fact that the classification logic 220 in Yair is used to segment the image input to the segmenter 140, not to associate a segmentation classifier and at least one segment of the input segmented image, as recited. Yair's classification portion of segmenter 140 is not working on a segmented image. Rather, it is segmenting an unsegmented image.

Accordingly, Yair does not teach a segmentation classification association circuit that associates a segmentation classifier and at least one segment of an input segmented image, as asserted in the Office Action. At best, Yair teaches segmenting an unsegmented input image using, among other things, classification logic.

Yair also does not disclose "an image processing tool association circuit that determines at least one image processing tool corresponding to the image classifier." The Office Action admits this on page 3, lines 3-6.

In an attempt to supply this admittedly missing feature, the office Action turns to Goldberg.

Goldberg provides a graphical user interface-based image acquisition interface for CCD camera control and image acquisition. The functions performed by Goldberg's device include CCD detector control, image display and manipulation, and file saving and loading. See col. 3, lines 60-64 of Goldberg. Columns 5-8 of Goldberg disclose image display and manipulation. These functions include zooming, scaling for display, point and region selection, lineout display, and color table display, gamma scaling, and background subtraction.

Goldberg has nothing to do with OCR or image segmentation. Although Goldberg has image processing tools, Goldberg fails to provide an image processing tool association circuit that determines one image processing tool corresponding to any segmentation classifier, let alone "the segmentation classifier" recited in claim 1.

Actually, Goldberg is directed to solving a problem that does not appear in Yair. Goldberg is directed to integrating several functions which required use of several separate programs and analyzed image data only after the image data was acquired, saved and reloaded by an analysis program. One problem addressed by Goldberg is alignment of an interferometer involving image analysis. The alleged rationale for combining Goldberg with Yair is to provide "real time data analysis support for images acquired during alignment of image acquisition analysis." - see page 3, last three lines of the office Action. However, Yair does not disclose any "alignment of image acquisition" or any "alignment of image acquisition analysis."

The Office Action fails to provide any motivation to combine these two disparate references. Federal Circuit case law makes it abundantly clear that a showing of motivation to combine references must be clear and particular, and that broad, conclusory statements about the teaching of multiple references, standing alone, are not "evidence." The Office Action must also demonstrate that modifying one reference in view of another reference is even feasible. Moreover, the case law requires that for motivation to be proper, showing that something is feasible is not enough. Just because something is feasible does not mean that it is desirable or that one of ordinary skill in the art would be motivated to do what is feasible. The Federal Circuit has repeatedly pointed out that motivation to combine references requires a showing not just of feasibility, but also of desirability.

The Office Action completely fails all of the aforementioned case law requirements to constitute a showing of proper motivation to combine Yair and Goldberg. In fact, the Office

Action fails to even indicate what would motivate one of ordinary skill in the art to combine

these two references. Rather, as noted above, the Office Action merely states what will

happen if the references are combined. The Office Action alleges that the combination would

provide real-time data analysis support for images acquired during the alignment of image

acquisition analysis. As noted above, Yair does not disclose alignment of image acquisition

or alignment of image acquisition analysis, nor does it need the GUI of .Goldberg.

Applicant respectfully contends that the Office Action provides that there is no proper

motivation to combine Yair and Goldberg, Applicant also respectfully notes that there are no

displays disclosed in Yair. There is no need for a dedicated user interface in Yair. Yair

captures an image, segments the image, OCR's the segmented image and stores the image.

Nor does Yair disclose that it uses fully customizable image processing tools provided by an

interactive data language programming environment for which Goldberg's GUI to operate in

the IDL environment. Moreover, Yair's device shows no indication that it needs a dedicated

user interface, and presumably works well without such an interface.

Moreover, even if it were feasible and desirable to combine these two references,

which the Office Action has not demonstrated, the combination would not render the claimed

invention obvious because, even if combined, the combination would still not have the

features recited in claim 1, including a segmented image, a classification association circuit,

as recited, or an image processing tool association circuit that determines at least one image

processing tool corresponding to the segmentation classifier.

Additionally, the assertion that one could incorporate a toolbox of various analytical

tools into Yair is based solely on feasibility, not desirability. Similar comments apply to

independent claims 10 and 12. Claim 10 recites a storage medium that stores information

controlling assembly of a dedicated user interface that allows manipulation of an input

segmented image, with information that associates a segmentation classifier and at least one

segment of the input segmented image, and information that determines at least one image

processing tool corresponding to the segmentation classifier. Claim 12 recites the method of

assembling a dedicated user interface for manipulation of an input segmented image by

determining a segmentation classifier associated with at least one segment of the input

segmented image and associating at least one image processing tool with the at least one

segment of the input segmented image. Neither Yair nor Goldberg, alone or in combination,

disclose these features of claims 10 or 12 for the reasons stated above regarding the

corresponding subject matter of claim 1. Moreover, as pointed out above, the Office Action

provides no proper motivation to combine those two references.

Claims 2, 11, and 13 further distinguish over Yair and Goldberg. Claim 2 recites the

additional feature of a user interface assembly circuit that assembles at least one selectable

interface widget into at least one user interface based on the at least one image processing

tool corresponding to the segmentation classifier. Neither Yair nor Goldberg disclose or

suggest an image processing tool corresponding to an image segmentation classifier. The

Office Action fails to demonstrate a proper motivation for combining these two references,

and even if combined, because of the absence of other claimed features from both references,

for reasons set forth above, the reference combination would not render the claimed invention

obvious.

On page 15 of the final Office Action, this argument is allegedly treated but is mis-

stated. The Office Action completely fails to re-state Applicant's argument. Instead, it just

says that Applicant argues what claim 2 recites, and disagrees with that. Unfortunately, this

is typical of the Office Action, which continually fails to address Applicant's arguments in

any substantive way on their merits.

Yair admittedly has no disclosure of an image processing tool association circuit that

determines at least one image processing tool corresponding to the segmentation classifier,

and Goldberg does not even disclose a segmentation classifier. Moreover, there is no proper motivation to combine these references, as pointed out above.

Similar comments apply to claims 11 and 13, which recite similar features to that recited in claim 2. It is noted that claim 11 does not recite a widget.

Claim 6 depends from claim 1 and claim 16 depends from claim 12. Neither Yair nor Goldberg discloses the additional feature recited in these claims. Yair, which is alleged in the Office Action to show this feature, only discloses a segmentation classifier. See Fig. 2, and the associated disclosure of Yair. Yair does not disclose both an image segmenter and a segmentation classifier, as recited in claims 6 and 16. Yair does not segment an image and classify the segmented image, as recited in claims 6 and 16.

The Office Action does not even address Applicant's argument that Yair does not disclose both an image segmenter and a segmentation classifier, as recited in claims 6 and 16.

For at least the reasons outlined above, the combination of Yair and Goldberg fails to teach, disclose or suggest all of the features of claims 1-3, 6, 9-14, 16 and 21. Nor has the Office Action met the standards required by the Administrative Procedures Act (APA) or provided evidence establishing a prima facie case of obviousness of claims 1-3, 6, 9-14, 16 and 21 based on Yair and Goldberg. The Office is supposed to adhere to these accord Applicants via the Administrative Procedures Act. See in this regard, In re Zurko, 119 S.Ct. 1816, 50 USPQ2d 1930 (1999), and In re Gartside, 53 USPQ2d 1769 (Fed. Cir. 2000). Thus, the combination of Yair and Goldberg fails to render obvious the subject matter of claims 1-3, 6, 9-14, 16 and 21 under 35 U.S.C. §103(a). Withdrawal of the rejection of claims 1-3, 6, 9-14, 16 and 21 as unpatentable over the combination of Yair and Goldberg is respectfully solicited.

Examiner Ha did have time to review the references in a cursory manner during the interview and focused on the statement in col. 2, lines 38-40 that "[T]he classification logic

dynamically reclassifies the merged and split connected components during the segmentation process." Applicant respectfully reminds the Office, as pointed out above, that Yair's input image is unsegmented and is segmented into image portions each containing a single character, rather than being a segmented input image, and that whether reclassification occurs after the unsegmented image is input, Yair's input image is unsegmented.

The Office Action rejects claims 4, 5, 15 and 20 under 35 USC §103(a) as unpatentable over Yair in view of Goldberg, and further in view of U.S. Patent 5,710,877 to Marimont. This rejection is respectfully traversed.

Claim 4 recites the system of claim 1 and a segmentation mapping circuit that determines the at least one segment based on a position of a user input device in the input segmented image.

Claim 5 recites the system of claim 4, wherein the segment mapping circuit highlights the at least one segment based on the position of a user input device in the input segmented image.

Claim 15 recites the method of claim 12 and determining at least one segment based on a position of a user input device.

Claim 20 recites the method of claim 12, and highlighting the at least one segment of the input segmented image.

The combination of Yair and Goldberg fails to render the claims from which claims 4, 5, 15 and 20 depend unpatentable. Marimont does not remedy the deficiencies in the combination of Yair and Goldberg outlined above. Claims 4, 5, 15 and 20 are patentable over the asserted combination.

Marimont concerns generating a data structure representation of an original image that captures geometric and topological information about regions in the image and spatially index those regions. In other words, Marimont inputs an image that is unsegmented and

segments the image. See col. 2, lines 33-64 of Marimont. However, as pointed out above, the recited input image is already segmented. Yair segments an unsegmented image into image portions, each containing a single character for OCR purposes. There would be no incentive to modify Yair (taken alone or in view of Goldberg), which has already segmented the image, and feed that segmented image into Marimont, which is designed to segment an unsegmented image.

The Office Action fails to present any motivation to make the asserted combination. All the Office Action does is allege what will happen when such a combination is made. The Office Action asserts that by using Marimont to modify the combination of Yair and Goldberg, the resulting system would permit user interaction with the structures in an original image through image structure mapping.

However, as pointed out above, there is no proper motivation shown to combine these three references. Moreover, there is a disincentive to combine Marimont with the two other references because the Yair image is already segmented. There is no showing why one would want to segment an already segmented image when none of the references teach this feature. Additionally, Yair is not concerned with a graphical display and expresses no need for one. Marimont is concerned with photos (shown in Fig. 6) suitable for this imaging system, not handwriting, which is the focus of Yair. The Office Action fails to demonstrate the feasibility of the proposed reference combination as well as its desirability with such disparate input images and goals, i.e., OCR of handwriting versus computer enhancement of photographs.

The Final Office Action appears to indicate that claims 4, 5, 15 and 20 is not directed to segment an already segmented image. This is incorrect. Claim 1, from which claims 4 and 5 depend, and claim 12, from which claims 15 and 21 depend, clearly recite "an input segmented image." Neither Yair nor Goldberg disclose this claimed feature.

For at least the reasons outlined above, the combination of Yair, Goldberg and Marimont fails to teach, disclose or suggest all of the features of claims 1-21. Nor has the Office Action met the standards required by the APA or provided evidence establishing a prima facie case of obviousness of claims 1-21 based on Yair, Goldberg and Marimont. Thus, the combination of Yair, Goldberg and Marimont fails to render obvious the subject matter of claims 1-21 under 35 U.S.C. §103(a). Withdrawal of the rejection of claims 4, 5, 15 and 20 under 35 U.S.C. §103(a) as unpatentable over the combination of Yair, Goldberg and Marimont is respectfully solicited.

The Office Action rejects claims 7, 17 and 18 under 35 USC §103(a) as unpatentable over Yair in view of Goldberg, and further in view of U.S. patent 6,026,182 to Lee. This rejection is respectfully traversed.

Claim 7 recites the system of claim 1, wherein the image processing tool association circuit determines the at least one image processing tool based on at least one of predefined configurable association data, updatable configurable association data or user configurable association data.

Claim 17 recites the method of claim 12 and determining at least one image processing tool based on at least one of predefined configurable association data, updatable configurable association data or user configurable association data.

Claim 18 recites the method of claim 17 and comprising updating the user configurable association data.

Claims 7, 17 and 18 are patentable over Yair and Goldberg for the reasons stated above regarding claims 1 and 12. Moreover, Lee does not supply the deficiencies outlined above in Yair and Goldberg. Therefore, for these reasons alone, claims 7, 17 and 18 patentably define over Yair, Goldberg and Lee.

Lee is directed to compressing digital video signals, and includes a method of

segmenting or identifying selected objects from other objects within a video image frame. A

user forms an interior outline within the interior object perimeter and the interior outline is

expanded automatically to form an exterior outline. See col. 3. lines 49-67 of Lee. The

segmentation method operates on motion pictures and tracks objects in subsequent frames.

The Final Office Action fails to provide any proper incentive to modify the

combination of Yair and Goldberg based on Lee. Instead, the Office Action merely states

what would result from such a combination of references, which allegedly is a predefined

configuration tool available to image processing toolbox end user.

This completely violates the mandate of the case law cited above, which requires that

the Office Action provide proper motivation to combine these references, including not only

the feasibility of the combination, but also desirability of the combination.

Moreover, the Office Action fails to demonstrate why one of ordinary skill in the art

would desire to modify Yair, which already has segmented the handwriting image, by using a

video image segmentation which starts with a hand drawn interior outline and expands it

automatically.

Moreover, even if the references were combined, the Office Action fails to

demonstrate that the segmentation techniques of Yair, Goldberg and Lee are compatible, or

how they would work when combined, let alone why the combined image segmentation

would be desirable.

For at least the reasons outlined above, the combination of Yair, Goldberg and Lee

fails to teach, disclose or suggest all of the features of claims 7, 17 and 18. Nor has the

Office Action met the standards required by the APA or provided evidence establishing a

prima facie case of obviousness of claims 7, 17 and 18 based on Yair, Goldberg and Lee.

Thus, the combination of Yair, Goldberg and Lee fails to render obvious the subject matter of claims 7, 17 and 18 under 35 U.S.C. §103(a).

The Final Office Action fails to address these arguments. Instead, it merely repeats what the first Office Action states would happen if the reference combination were made. However, this assertion has been completely rebutted by Applicant's comments which have not been addressed at all on their merits in the Final Rejection. This failure to address Applicant's arguments directly on their merits is a denial of substantive a procedural due process and fails to overcome Applicant's arguments.

Withdrawal of the rejection of claims 7, 17 and 18 under 35 U.S.C. §103(a) as unpatentable over the combination of Yair, Goldberg and Lee is respectfully solicited.

The Office Action rejects claims 8 and 19 under 35 USC §103(a) as unpatentable over Yair in view of Goldberg, and further in view of U.S. Patent 6,009,196 to Mahoney. This rejection is respectfully traversed.

Claim 8 recites the system of claim 1, wherein the segmentation classifier corresponds to at least one of a photographic region, a half-tone region, a text region, a line art region, a black and white region or a color region.

Claim 19 recites the method of claim 12, wherein the segmentation classifier corresponds to at least one of a photographic region, a half-tone region, a text region, a line art region, a black and white region or a color region.

Mahoney is directed to analyzing image data, representing images containing text, to partition the image into running and non-running text regions and to further classify the non-running text regions as a horizontal sequence, a vertical sequence or a table.

Claims 8 and 19 are patentable over Yair and Goldberg for at least the reasons stated above regarding claims 1 and 12. Additionally, Mahoney does not cure the defects in the

combination of Yair and Goldberg. Thus, for the reasons above, claims 8 and 19 patentably define over Yair, Goldberg and Mahoney.

The Office Action also fails to make out a prima facie case of obviousness because it does not provide proper motivation to combine Mahoney with Yair and Goldberg. In fact, the Office Action gives no reason to combine the references. Instead, the Office Action just states what would happen if the references were to be combined, i.e., that the combination would provide more enhanced classifier tools to an end user.

The Office Action fails to demonstrate that combining these references is feasible and fails to demonstrate that combining these reference would be desirable. Mahoney is directed to page layout analysis, which is taught by Mahoney to be divided into two broad categories, i.e., geometric layout analysis and logical structure analysis. See col. 1, lines 52-67 of Mahoney. The Office Action fails to demonstrate that either of these page layout analyses categories is relevant to Yair's optical character recognition of handwritten data or printed data, or to Goldberg's alignment of an interferometer, for example.

Applicant respectfully submits that one of ordinary skill in the art would not have found it feasible and desirable to modify Yair and Goldberg in view of Mahoney, let alone to have picked only a certain portion of Mahoney to modify the combination of Yair and Goldberg. The only motivation to combine these references is hindsight learned from reading Applicant's disclosure, and this is not a proper basis on which to combine references in a rejection based on 35 USC §103(a).

Again, instead of answering Applicant's aforementioned arguments, the Final Office Action does not address them and merely repeats the rejection made in the first office Action. This is a fundamental denial of both substantive and procedural due process.

For at least the reasons outlined above, the combination of Yair, Goldberg and Mahoney fails to teach, disclose or suggest all of the features of claims 8 and 19. Nor has the

Office Action met the standards required by the APA or provided evidence establishing a prima facie case of obviousness of claims 8 and 19 based on Yair, Goldberg and Mahoney. Thus, the combination of Yair, Goldberg and Mahoney fails to render obvious the subject matter of claims 8 and 19 under 35 U.S.C. §103(a). Withdrawal of the rejection of claims 8 and 19 as unpatentable over the combination of Yair, Goldberg and Mahoney is respectfully solicited.

A fair, balanced appraisal of the Final Office Action reveals that, instead of refuting Applicant's arguments as they are presented, the Office Action merely states disagreement with Applicant's arguments and then repeats the rejection. This is one of the reasons why Applicant scheduled a personal interview. During the interview, Primary Examiner Ba listened to Applicant's arguments and then asked Examiner Thai for his position with respect to those arguments. Examiner Thai did not refute any of Applicant's arguments. It is Applicant's understanding that the only reason that the Interview Summary prepared at the Interview stated that agreement was not reached was because Examiner Ba did not have time to completely read and analyze the application or any of the applied references before the interview. As stated above, Examiner Thai did not at all rebut Applicant's arguments presented at the interview.

This procedure was patently unfair to Applicant, whose undersigned representative prepared fully for the interview.

Under the circumstances, Applicant respectfully requests that Examiner Ba discuss the interview with the Primary Examiner who was unable to attend the interview and contact Applicant's undersigned representative to determine if Applicant's presentation at the Interview was persuasive, and that this Request for Reconsideration not be decided until after the Primary Examiner in charge of this application consults with Examiner Ba regarding the arguments made by Applicant's undersigned representative at the Interview.

In view of the foregoing amendments and remarks, Applicant submits

that this application is in condition for allowance. Favorable reconsideration and prompt

allowance of claims 1- 21 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to

place this application in better condition for allowance, the Examiner is invited to contact

Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Robert J. Webster
Registration No. 46,472

JAO:RJW/sxb

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OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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